

# What Should Nurses Know About Health Information Exchange?

## Outreach Materials

### Provided By:

The National Learning Consortium (NLC)

### Developed By:

The Office of the National Coordinator for Health Information Technology  
State Health Information Exchange Program

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## NATIONAL LEARNING CONSORTIUM

The National Learning Consortium (NLC) is a virtual and evolving body of knowledge and resources designed to support healthcare providers and health IT professionals working towards the implementation, adoption and meaningful use of certified EHR systems.

The NLC represents the collective EHR implementation experiences and knowledge gained directly from the field of ONC's outreach programs ([REC](#), [Beacon](#), [State HIE](#)) and through the [Health Information Technology Research Center \(HITRC\)](#) Communities of Practice (CoPs).

The following resource can be used in support of the [EHR Implementation Lifecycle](#). It is recommended by "boots-on-the-ground" professionals for use by others who have made the commitment to implement or upgrade to certified EHR systems.

### EHR Implementation Lifecycle



## DESCRIPTION & INSTRUCTIONS

The 'Exchange 101: Introduction to Direct Adoption and Implementation' outreach materials are intended to aid providers and health IT implementers with EHR Implementation Step 5: Achieve Meaningful Use. The collection of outreach materials can be used to educate different audiences about health information exchange using the Direct solution in support of implementing care coordination meaningful use objectives.

This specific resource includes an overview for nurses of how Direct exchange works and information on benefits of and enrollment in Direct.

Distribute these materials to the appropriate audiences to educate them about using Direct for health information exchange.

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# What Should Nurses Know About Health Information Exchange?

**The health care market is moving. Health information exchange (HIE) is becoming the standard of care among clinical practitioners.**

More than half of physicians are now using electronic health records (EHR) systems and about three-quarters of their EHR systems are reported to meet the meaningful use criteria set by the [EHR Meaningful Use Incentive Payment Program](#).<sup>i</sup> As part of this program, the Centers for Medicare and Medicaid Services (CMS) have issued close to \$7B in incentive payments to over 130,000 eligible providers.<sup>ii</sup> CMS published guidance for meaningful use stage two on August 23, 2012, specifying that eligible providers must connect with at least three external providers that do not use the same EHR solution, or they must establish an ongoing connection with at least one health information exchange entity. These providers must also review 80% of patient medication regimens at time of admission, transfer, or discharge, a process commonly known as medication reconciliation.<sup>iii</sup> Additionally, emerging innovative care delivery models like Accountable Care Organizations and Patient-Centered Medical Homes will likely demand some form of health information exchange among participating providers.<sup>iv, v</sup>

## THE EHR MEANINGFUL USE INCENTIVE PAYMENT PROGRAM

This federal program, created by the HITECH Act and maintained by the Centers for Medicare and Medicaid Services, provides financial incentives to physicians and hospitals that adopt health information technology, including electronic health records and health information exchange.

**Patients and families expect to interact with their health information and communicate electronically with their providers.**

Health care providers are looking to adopt health information technology (HIT) to meet growing consumer demand. Patients are increasingly technology-savvy. They are accustomed to technology that provides them access to all of their information (i.e. mobile banking and smartphones). Similarly, they expect to have access to their health information and are often surprised to learn the capability is not already present in their doctors' offices.<sup>vi, vii</sup> With an increasingly technology-enabled society, most patients are accustomed to communicating electronically using text messaging and email, and they expect to be able to communicate with their doctors in a comparable manner. Stage 2 meaningful use guidance supports this demand, requiring participating, eligible providers to make clinical summaries available to patients through a portal or personal health record (PHR) within 24 hours of the visit. Patients should also have the opportunity to access their longitudinal record through a portal or PHR at any time. To qualify for incentives, providers must provide online access to health information for over 50% of their patients. Stage 2 meaningful use guidance also requires providers to enter an electronic progress note for more than 30% of unique patients.<sup>viii</sup>

Nurses' understanding of and participation in health information exchange brings important benefits for their patients and their colleagues. Nurses are often the primary point of contact for patients or family members who seek access to health information and may also initiate or respond to requests for electronic health information from health professionals striving to attain meaningful use.

## How does Direct exchange work?

**Direct is inexpensive, quickly-deployed, nationally-endorsed, and not tied to any vendor solution.**

Direct is a protocol for encrypted messaging that supports the secure electronic exchange of health information between trusted entities (e.g. physicians, nurse practitioners, physician assistants, and case managers). It is not necessary for a health care provider to use an EHR in order to exchange information using Direct messaging. Without an EHR, Direct works much like an email service; however, unlike most email services, it is both highly secure and HIPAA-compliant. Health care providers with EHRs can use Direct as a complement to their current systems, either as a separate but parallel application or as a fully-integrated feature of their EHR system. Behind the system, Direct is enabled by health information service providers (HISPs) that are contracted to manage security and transport for Directed exchange, and, in some organizations, by a provider directory, which providers can query for the right Direct address.

### WHAT IS DIRECT EXCHANGE?

In its simplest form, Direct exchange functions like email accessed through a secure web portal, except that the messages are encrypted and can only be accessed by the intended recipient, thereby ensuring compliance with The Health Insurance Portability and Accountability Act (HIPAA). Where Direct messaging is integrated with EHR technology, messages and attachments can be sent and received directly from within the user's desktop rather than through a separate portal, which is much more convenient for the user and more easily sent and received in the format used by the EHR application.

## What are the benefits of Direct exchange?

The ability to exchange messages and electronic attachments securely using Direct exchange is an immediate benefit to providers, patients, and provider support staff. As EHR vendors integrate Direct exchange functionality with their technology and as more robust use cases emerge, the value and demand for Direct exchange will grow.

### **Sending and receiving secure messages with attachments**

Using Direct exchange, nurses can quickly and easily send and receive secure messages and electronic attachments to others in their network (i.e. PCPs, other specialists, diagnostic centers, home health caregivers, case managers, rehabilitative providers, acute care providers and payers), without concern about HIPAA compliance. Often, nurses must call or use fax machines to convey patient information to other providers, and must also manually document a record of that communication. In contrast, nurses with Direct exchange capabilities can draft an email, attach a file (i.e. lab result, referral paperwork, or prescription), and immediately send it to a colleague without moving from desk to printer to fax machine. Whereas some report that large documents can take up to four minutes to transmit via fax, transmission via Direct exchange is instantaneous. Additionally, upon receipt of a Direct message with an attachment, nurses can easily save electronic attachments to the appropriate patient's record rather than scanning a faxed copy and uploading it to the patient's electronic record, thereby removing one step from the office workflow.

## Communicating with patients

Direct provides opportunities for nurses to communicate more easily with patients, family members and other caregivers. Using Direct exchange, nurses can send and receive secure messages about the patient's treatment plan or diagnosis. For instance, a nurse can provide updated information about a patient's diagnosis and treatment plan, based on a recent lab result, and send that lab result directly to the patient. Similarly, patients can send messages to schedule an appointment, ask questions or provide updates to clinicians about health indicators monitored at home, such as blood pressure or weight.

As patients take more responsibility for management of their health care services and monitoring of their health and wellness status through Personal Health Records (PHR), they can use their PHR to aggregate diagnoses and other treatment records in an online personal repository. Patients can configure their information to allow a longitudinal view of their diagnosis or treatment history. Although patients can manually update PHRs, health care practices can serve their patients and support more active patient engagement and more effective self-management of health conditions by using Direct exchange to send diagnosis or treatment plans to the patient's PHR.

## Facilitating referrals and transitions of care

Compared to phone calls and paper faxes, Direct exchange delivers more seamless referrals between providers and better experiences for patients during transitions of care. Nurses can exchange referral and payer forms, along with care summaries, medication lists, and lab results with the referring or consulting provider in advance of their encounter with the patient. These documents can be exchanged immediately in the form of electronic attachments to a Direct message, eliminating the need for courier or patient transport of records, and thereby reducing the risk of lost documents, incomplete or inaccurate information. With the test results and diagnoses in hand, nurses are less likely to schedule unnecessary or duplicative tests, avoiding inconvenience, cost and often pain to the patient, but are better equipped to respond effectively to support diagnosis, care and treatment for the patient.

### WHAT IS A PHR?

A personal health record, or PHR, is an online electronic health record that is maintained by and fully available to a patient. PHRs can be updated manually by the patient or updated via various means of health information exchange, including Direct exchange. PHRs contain include lab results, care summaries, medication histories, and data collected and stored by patients or uploaded automatically by medical devices such as blood pressure monitors or electronic weighing scales.

### HOW DOES DIRECT EXCHANGE SUPPORT A CLOSED LOOP REFERRAL?

"Closed loop referrals" are one of the most promising use cases for HIE technology. When fully implemented, a referring provider's EHR will quickly and easily notify the consulting provider by generating a message that includes a longitudinal care summary, medication lists, lab results, and other information needed to support informed decision-making about diagnosis and treatment effectively and efficiently. Upon receipt of the referral and delivery of care to the patient, the consulting provider can generate and send a Direct message back to the referring provider to effectively "close the loop," communicating the outcomes from the consult and recommending any further actions to be taken to assure good outcomes for the patient.

## How do I sign up for Direct exchange?

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Visit [HealthIT.gov](http://HealthIT.gov) to learn more.



## References

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<sup>i</sup> Jamoom, E, Beatty P, Bercovitz A, et al. “Physician Adoption of Electronic Health Record Systems: United States, 2011.” NCHS Data Brief, number 98. Hyattsville, MD: National Center for Health Statistics.

<sup>ii</sup> July 2012 EHR Incentive Program Monthly Report. Available from: [https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/July2012\\_MonthlyReports.pdf](https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/July2012_MonthlyReports.pdf)

<sup>iii</sup> “HIT Policy Committee: Meaningful Use Workgroup Request for Comments Regarding Meaningful Use Stage 2.” Available from: [http://healthit.hhs.gov/media/faca/MU\\_RFC%202011-01-12\\_final.pdf](http://healthit.hhs.gov/media/faca/MU_RFC%202011-01-12_final.pdf)

<sup>iv</sup> Council on Clinical Information Technology. “Policy Statement – Health Information Technology and the Medical Home.” Pediatrics. 24 April. 2005.

<sup>v</sup> Patient-Centered Primary Care Collaborative. “Meaningful Connections.” Available from: [http://www.pcpcc.net/files/CeHIA\\_Meaningful-Connections-Guide\\_2009\\_1.pdf](http://www.pcpcc.net/files/CeHIA_Meaningful-Connections-Guide_2009_1.pdf)

<sup>vi</sup> Accenture. “Is Healthcare Self-Service Online Enough to Satisfy Patients?” Available from: <http://www.accenture.com/SiteCollectionDocuments/PDF/Accenture-Is-Healthcare-Self-Service-Online-Enough-to-Satisfy-Patients.pdf>

<sup>vii</sup> National Partnership. “Consumer and Patient Health Information Needs: Defining “Access” to Information.” Available from: [http://www.nationalpartnership.org/site/DocServer/Defining\\_Access\\_to\\_Information.pdf?docID=9721](http://www.nationalpartnership.org/site/DocServer/Defining_Access_to_Information.pdf?docID=9721)

<sup>viii</sup> CMS “Meaningful Use Stage 2 Final Rule.” Available from: [http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Stage\\_2.html](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Stage_2.html)